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REPORTS, CONCLUSIONS AND
RECOMMENDATIONS OF SUBSIDIARY
BODIES: ECONOMIC QUESTIONS,
ENVIRONMENTAL QUESTIONS

Trade and environmental matters

Note by the Secretary-General

1. In its resolution 50/95 of 20 December 1995, the General Assembly, inter alia, requested the United Nations Conference on Trade and Development (UNCTAD) to report, through the Commission on Sustainable Development, to the Economic and Social Council and to the Assembly at its special session in 1997 on concrete progress achieved on the issue of trade and environment.

2. The Secretary-General has the honour to transmit to the Economic and Social Council and the General Assembly the attached report (see annex), which was prepared by the UNCTAD secretariat in pursuance of resolution 50/95.

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Annex

TRADE AND ENVIRONMENT: CONCRETE PROGRESS ACHIEVED AND SOME OUTSTANDING ISSUES

Report prepared by the UNCTAD secretariat

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INTRODUCTION

1. This report examines progress achieved on the issue of trade and environment since the United Nations Conference on Environment and Development (UNCED). It focuses on progress achieved in meeting the objectives of Agenda 21, Chapter 2, "International cooperation to accelerate sustainable development in developing countries and related domestic policies", in particular Programme areas A, "Promoting sustainable development through trade" and B, "Making trade and environment mutually supportive". The report also takes into account the decisions on trade, environment and sustainable development, adopted by the CSD at its second, third and fourth sessions and highlights some outstanding issues which emerge from the post-UNCED debate.

2. The report takes into consideration the results of intergovernmental deliberations on trade and environment conducted in the World Trade Organization (WTO), in particular in the Committee on Trade and Environment (CTE), UNCTAD, the CSD and the OECD, as well as work conducted at UNEP. It also draws from a recent document prepared by the UNCTAD secretariat for UNCTAD's Commission on Trade in Goods and Services, and Commodities.[1]

3. Agenda 21 called for consensus-building on the intersection of environment, trade and development areas in international forums as well as in the domestic policy of each country (para. 2.4). This report focuses on the intergovernmental debate. So far, this debate has been primarily an educational process. Intensive intergovernmental deliberations have succeeded in maintaining the momentum generated at UNCED to promote increased awareness and understanding, greater confidence and mutual respect between trade, environment and developmental communities, as well as in reiterating a clear commitment to address trade and environment on the basis of multilateralism and cooperative approaches.

4. The post-UNCED debate has had a number of positive results. First, while the earlier debate was characterized largely by fears of important contradictions between trade and environment policies, the post-UNCED debate has focused on exploring the scope of the complementarities between trade liberalization, economic development and environmental protection, and has enlarged the development dimension in the discussion on most issues. Conceptual and empirical analyses and debate have helped to set aside some of the early fears of incompatibility between trade and environment policies which could have induced inappropriate policy choices.

5. Secondly, there has been a growing consensus that positive measures are effective instruments in supporting developing countries in their efforts to achieve the objectives of sustainable development, including in the context of multilateral environmental agreements (MEAs). Designing and implementing such measures constitutes one of the important challenges in the future trade and environment agenda.

6. Thirdly, it has been possible to build greater confidence in the ability of the multilateral trading system to respond to environmental considerations and sustainable development objectives. The CTE has concluded that "Discussions

have demonstrated that the multilateral trading system has the capacity to further integrate environmental considerations and enhance its contribution to the promotion of sustainable development without undermining its open, equitable and non-discriminatory character; implementation of the results of the Uruguay Round negotiations would represent already a significant contribution in that regard".[2]

7. There is nevertheless a perception that mutual understanding between trade, environment and development communities is still evolving, and that a larger consensus still needs to be built on a common agenda to strengthen mutual supportiveness of trade, environment and development.

8. With regard to the implementation of Agenda 21, Chapter 2, programme area A, "Promoting sustainable development through trade", Governments, by completing the Uruguay Round negotiations have taken an important step towards meeting the objectives set out in this programme area. Certain developing countries, however, have benefited little from recent trade liberalization, particularly those highly dependent on trade preferences and those dependent on primary commodity exports, particularly in Africa. Little progress has been made in halting the marginalization of least developed countries in the world economy.

9. In addition, the report notes that trade liberalization should be accompanied by environmental and resource management policies if its full potential contribution to better protecting the environment and promoting sustainable development through more efficient allocation and use of resources is to be realized.

10. With regard to the debate on the effects of existing environmental policies on market access, widespread effects have not been observed, but there is continued concern with regard to specific products and small- and medium-sized enterprises (SMEs), in particular in developing countries. Market access and competitiveness concerns, however, can be alleviated by appropriate policies at the national and international levels.

11. The post-UNCED debate has suggested that consumer preferences for "environment-friendly" products may provide trading opportunities for developing countries and facilitate the internalization of environmental costs and benefits by producers. A number of issues (such as the size and stability of markets for environment-friendly products, possibilities to obtain price premiums, costs, and questions related to definition and certification) still need to be examined, in order to assess the potential contribution that these opportunities can make to sustainable development. In this context, while eco-labelling may help in moving towards sustainable consumption patterns, in particular in developed countries, the CSD has recognized that it may have an impact on trade. Thus, the post-UNCED debate has increasingly treated eco-labelling as a trade issue.

12. With regard to programme area B, "Making trade and environment mutually supportive", Governments have taken steps to ensure that the trade and environment theme is incorporated in the work programmes of the WTO, UNCTAD, UNEP and other intergovernmental organizations. The debate has also stressed

the need to improve coordination between trade and environment officials at the national level. The CSD has played an important role in promoting cooperation and complementarity in the work of WTO, UNCTAD and UNEP and in identifying gaps.

13. Post-UNCED deliberations have clearly endorsed and supported multilateral solutions based on international cooperation and consensus as the best and most effective way for governments to tackle environmental problems of a transboundary or global nature. In this context, while endorsing the important role of MEAs, there has been considerable debate on the policy instruments used to achieve the objectives of an MEA.

14. Much of the trade and environment debate has focused on the relationship between trade measures in MEAs and the provisions of the multilateral trading system. While views differ on whether any modifications to the provisions of the multilateral trading system are required, progress has nevertheless been achieved in building mutual understanding and respect between trade and environment communities. In addition, a number of recommendations may help prevent conflicts from arising, such as policy coordination at the national level and improved compliance and dispute settlement mechanisms available in MEAs. There has been increased recognition that positive measures are important and can be indispensable elements to assist developing countries to become parties to an MEA and to tackle the environmental problems that the MEA is seeking to resolve, in keeping with the principle of common but differentiated responsibility.

15. The debate has shown that a number of outstanding and emerging issues still need to be addressed in order to continue building a balanced and integrated approach to the trade, environment and sustainable development agenda. The focus should be on the promotion of trade and investment, building on potential synergies between trade liberalization, economic reform, and improved management of natural resources and the environment. This requires an examination of the role of investment, economic instruments, and other initiatives in broadening the options for the effective implementation of positive measures, including access to and diffusion of environmentally sound technologies, involving the business community and the civil society in the design of such measures. The report suggests some elements which could help to update the environment/trade and development agenda contained in Agenda 21, paragraph 2.22.

I. PROGRESS IN PROMOTING SUSTAINABLE DEVELOPMENT THROUGH TRADE

A. Progress achieved on Agenda 21

16. Programme area A of Agenda 21, Chapter 2, "Promoting sustainable development through trade", includes among its policy objectives: (a) to promote an open, non-discriminatory and equitable multilateral trading system; (b) to promote access to markets for exports of developing countries; and (c) to improve the functioning of commodity markets and achieve sound, compatible and consistent commodity policies at national and international levels with a view to optimizing the contribution of the commodity sector to sustainable development, taking into account environmental considerations.

17. Since UNCED, Governments have taken a major step by completing the Uruguay Round of multilateral trade negotiations. Implementation of its results in a balanced way will yield concrete progress with regard to each of the objectives mentioned above. In addition, many developing countries have made progress in implementing broad economic reforms which enable them to take advantage of a more open trading environment. By doing so, in many respects they have also created better options to move towards sustainable development.

18. However, a number of outstanding issues still weigh heavily in meeting the objectives of Agenda 21. First, Governments have continued to emphasize that the multilateral trading system should not be undermined by resort to unilateral measures and that environmental and social concerns should not be used for protectionist purposes. Secondly, some countries have benefited little from recent trade liberalization. The CSD, at its second session, noted with concern the situation of "certain developing countries that will continue to face major difficulties, particularly those highly dependent on trade preferences, those that are net food-importers and those dependent on primary commodity exports, particularly in Africa".[3] Little progress has been made to halt the process of marginalization in the world economy of the least developed countries.[4] The Midrand Declaration, adopted at UNCTAD IX, states that "the least developed counties (LDCs), particularly those in Africa, and other developing countries remain marginalized by weak supply capabilities and are unable to benefit from trade".[5]

19. Thirdly, as regards commodity trade, beyond the positive impacts of the Uruguay Round Agreement on Agriculture, limited progress has been made. In particular, since UNCED many developing countries, especially lower-income countries, have experienced little progress in diversifying their production away from heavy reliance on a handful of commodities.

20. The emphasis by the CSD "that for all developing countries to benefit more fully from trade liberalization, the achievement of other objectives identified in Agenda 21, particularly better functioning of commodity markets, increasing foreign direct investment (FDI) in developing countries and financial assistance, including debt relief, are important"[6] continues to be relevant to policy efforts.

21. During the 1990s, FDI has come to play an increasingly important role with respect to providing developing countries with sources of long-term capital. In 1995, FDI flows to developing countries reached record levels of $100 billion.[7] In addition, developing countries have become important outward investors, with flows reaching $47 billion in 1995. Despite the overall positive trend with respect to international investment, concerns remain. At the regional level, the marginalization of Africa with respect to FDI flows remains troubling: foreign direct investment flows to Africa remained largely stagnant in 1995 at $5 billion. Given the continent's substantial capital needs and serious environmental challenges, this trend is of particular concern.

B. The post-UNCED debate on trade liberalization and sustainable development

22. As post-UNCED progress in other priorities identified in Agenda 21, such as the provision of additional financial resources and access to and transfer of technology, has not as yet fulfilled the expectations of Agenda 21, trade liberalization and improved market access have become even more necessary as a means of generating sources of financing for sustainable development.[8]

23. In the discussions in the CTE many have considered that the focus of further work should be on trade and trade-related measures applied by WTO Members that will remain after the Uruguay Round results are fully implemented.[9] Reference has been made in particular to tariff escalation and tariff peaks, production and export subsidies, high internal taxes particularly on tropical products, export restrictions and export taxes, state trading and various non-tariff barriers. The CSD, at its fourth session, invited UNCTAD, in cooperation with UNEP and other relevant organizations, such as OECD, taking into account the work already under way at the WTO, to examine how further trade liberalization can result in environmental benefits and contribute to sustainable development, including by examining recent analyses on these topics.

24. While deliberations have focused on agriculture, reference has also been made to the need to examine the potential environmental benefits which could accrue from the reduction and removal of remaining trade restrictions and distortions affecting sectors and products in which developing countries have a particular export interest, such as textiles and clothing, leather and leather products, footwear, forest products, fish and fish products, minerals and mining products, agricultural products, other natural resource-based products and primary commodities.[10]

25. In the post-UNCED process, progress has been made in better understanding the relationship between trade liberalization, environmental benefits and sustainable development. Economic theory suggests that, in the absence of significant market and policy failures, trade liberalization can result in reduced negative environmental impacts. Firstly, by improving the efficiency of resource allocation and use, trade liberalization will result in the use of fewer inputs (including of environmental resources) for the same level of output of goods and services. Secondly, by generating growth, trade liberalization will help to increase demand for environmental quality and relieve environmental pressures associated with poverty. Opening new market opportunities for developing countries should reduce the dependence of such countries on resource-intensive activities. And improving living standards is likely to enhance both the ability and the willingness of countries to devote more resources to environmental protection.

26. It has been noted that trade liberalization should be accompanied by environmental and resource management policies if its full potential contribution to better protecting the environment and promoting sustainable development through more efficient allocation and use of resources is to be realized. In this context, the CSD has stated that "further trade liberalization is a necessary but not sufficient condition for sustainable

development" and that "trade liberalization needs to be complemented by the adoption of sound environmental policies".[11]

27. The CSD has noted that "National Governments have an interest in analysing environmental and social effects of significant changes in the volume and patterns of composition in production and consumption, including those resulting from trade policy reforms, and making, if required, the necessary policy adjustments with a view to correcting market and policy failures and internalizing environmental costs".[12] The OECD, as part of its work on procedural guidelines, has developed a guideline on trade and environmental reviews.[13] Environmental reviews may be used by Governments, at the national level. Further work is needed on conceptual and methodological aspects. The CSD has stressed "the importance of developing a framework to facilitate the assessment of the environmental impact of trade policies, taking into account the special needs of developing countries and countries with economies in transition" and has invited UNEP,[14] in cooperation with UNCTAD, was invited to carry out work in this area.

C. Market access

1. Environmental policies and market access

28. For the successful implementation of the objectives of Agenda 21, it is important to ensure that environmental requirements in importing countries do not result in unnecessary adverse effects on exports, in particular for developing countries.

29. Environmental requirements take the form of standards and technical regulations, product-content requirements (such as regulations limiting the amount of hazardous substances that can be traced in a product), recycled content requirements, labelling and packaging requirements, taxes and charges as well as a range of voluntary measures, such as eco-labelling. Apart from voluntary standards and mandatory technical regulations implemented by Governments, private firms or importers may impose certain requirements on their foreign suppliers. Finally, NGO campaigns may influence market access conditions.

30. In addressing the question whether existing trade rules provide sufficient safeguards (including through their transparency provisions), to deal with environmental policies which have significant trade effects, discussions have focused on two sets of issues: (a) are environmental requirements different from other measures covered by provisions in the WTO? and (b) how have environmental policies affected market access, particularly for exports from developing countries?

31. With regard to question (a) some argue that environmental requirements are no different from other standards and technical regulations covered by the Technical Barriers to Trade Agreement (TBT). Others argue that environmental standards and technical regulations are different in that they comprise measures: (i) which are largely voluntary; (ii) which may be based upon non-product related process and production methods (PPMs); (iii) for which

channels of information dissemination are less clearly established; and (iv) based on the precautionary principle.

32. However, the CTE concluded that no modifications to WTO rules are required to ensure adequate transparency for existing trade-related environmental measures.[15] However, the CTE noted that some WTO members are dealing with some notifications differently.

33. On the question of market access, there is no evidence to suggest that existing environmental policies have generalized effects on market access for developing countries. This is in part due to the fact that product-related environmental requirements are not yet widespread. UNCTAD studies indicate, however, that environmental requirements are more frequent in certain sectors, including sectors of export interest to developing countries, and that market access and competitiveness concerns appear larger in the case of SMEs.[16] Unilateral and extra-territorial measures continue to generate concern.

34. UNCTAD's studies indicate, that market access concerns may be alleviated by the timely provision of information, capacity-building, support for access to and transfer of technology, testing and certification facilities, and other policies and measures.

35. Furthermore, in Agenda 21 and in the post-UNCED deliberations in UNCTAD it has been proposed to further develop certain concepts and propositions that could be considered when designing and implementing environmental policies with potentially significant trade effects, such as transparency, least trade restrictiveness, and the need to take account of the special conditions and development needs of developing countries.[17]

2. Trading opportunities for environment-friendly products

36. The CSD has noted that consumer preferences for "environment-friendly" products may create trading opportunities, including for developing countries.[18] On the other hand, environmental claims may at times create informal obstacles to trade. Surveys of various categories of environmentally-preferable products have been made, but a better understanding is still needed of the potential role that the promotion of trading opportunities for environment-friendly products can make to sustainable development requires further analysis of the size and stability of markets for environment-friendly products, possibilities to obtain price premiums, costs of producing, certifying and marketing these products, problems related to the definition and identification of environment-friendly products, and certification issues.[19] In UNCTAD, CTE and other forums, some have noted that such opportunities are not always easy to exploit and require expertise, technology and resources which may not always be available to developing countries.

37. Governments, international agencies, including the International Trade Centre (ITC), and the private sector could assist developing countries in entering niche markets for environmentally preferable products. Capacity-building could be geared towards identifying markets for environment-friendly products, raising awareness of these opportunities among producers, providing

information to consumers, increasing the supply and improving the marketing of such products.

38. Conceptually and practically, there can be synergies between trade in environment-friendly products and internalization of environmental costs by producers, to the extent that product differentiation may help in passing increased costs to consumers.

3. Eco-labelling

39. At UNCED, eco-labelling was considered in the context of changing consumption patterns,[20] but not as a major trade issue. In the post-UNCED period, however, there have been intensive intergovernmental deliberations in UNCTAD, OECD, the CTE and other forums on the relationship between eco-labelling and international trade.

40. This development can be explained by several factors. Firstly, since UNCED, the coverage of eco-labelling programmes has been extended to include highly-traded products. Secondly, eco-labelling has increasingly incorporated the life cycle analysis (LCA), which may lead to the use of criteria related to non-product-related processes and production methods (PPMs). Thirdly, specific cases, such as a proposed eco-label for tropical timber in Austria and a European Union eco-label for paper, fuelled concerns about the trade effects of eco-labels. Finally, conceptually eco-labelling touches upon several aspects of the trade and environment interface, particularly the issue of non-product-related PPMs and the legal definition of like products.

41. The CSD has recognized that eco-labelling can have an impact on trade.[21] Several proposals have been put forward that aim at strengthening the compatibility between the environmental objectives of eco-labelling and trade interests. The International Organization for Standardization (ISO) has been developing international standards for eco-labelling, as part of the 14,000 series, to which eco-labelling bodies can adhere on a voluntary basis. These standards provide useful guiding principles for the operation of eco-labelling programmes, covering, inter alia, product environmental criteria, transparency, trade aspects, accessibility and mutual recognition.

42. Little progress has been made in building consensus on how to deal with the issue of non-product-related PPMs. The relevant ISO standards, while recognizing and, to some extent, encouraging the use of LCA, do not specifically address the trade aspects of the use of PPM related criteria in eco-labelling programmes.[22] The only tool referred to in the corresponding ISO standards which can help to address such aspects is mutual recognition.

43. Mutual recognition, which in practice is a complex issue, requires that an eco-labelling programme is first established in the exporting country, something that has proved to be difficult in several developing countries. The concept of equivalency provides more flexibility in that it does not imply such requirement. Although several fora have recommended the exploration of the concept of equivalency, little progress has been made. Attempts to reflect this concept in the ISO guidelines has turned out to be a highly complex issue.

44. Deliberations in the CTE have focused on the question whether or not eco-labelling programmes based on LCA are covered by the TBT Agreement. Views differ among WTO Members. The CTE has stressed the importance of WTO Members following the provisions of the TBT Agreement and its Code of Good Practice, including those on transparency, "without prejudice to the views of WTO Members concerning the coverage and application of the TBT Agreement to certain aspects of such voluntary eco-labelling schemes/programmes and criteria, i.e. those aspects concerning non-product-related PPMs, and therefore to the obligations of Members under this Agreement regarding those aspects".[23]

II. MAKING TRADE AND ENVIRONMENT MUTUALLY SUPPORTIVE

A. Progress achieved on Agenda 21

45. Programme area B, "Making trade and environment mutually supportive", inter alia, includes the following objectives:

(a) To make international trade and environment policies mutually supportive in favour of sustainable development;

(b) To clarify the role of GATT, UNCTAD and other international organizations in dealing with trade and environment issues;

(c) To encourage a constructive role on the part of industry in dealing with environment and development issues.

46. With regard to (a), several Governments have taken steps, including through institutional mechanisms, to achieve greater integration of trade and environment at the national level, e.g., by promoting better coordination between trade and environment ministries. In a number of cases there has been a larger involvement of non-governmental organizations. Debates in several fora including CSD, UNCTAD, WTO, UNEP, and OECD have stressed that better coordination between the relevant Ministries at the national level[24] can help to prevent conflicts between trade, environment and development. Building institutional capacity is of key importance in this context.

47. Concerning objective (b), Governments have taken steps to include Agenda 21 follow-up activities, particularly in the area of trade and environment, firmly in the work programmes of GATT/WTO, UNCTAD and other relevant international organizations.

48. In the case of GATT/WTO, the Preamble to the Agreement Establishing the World Trade Organization (WTO) includes, for the first time in the context of the multilateral trading system, reference to the objective of sustainable development and to the need to protect and preserve the environment. In addition, WTO included several references to environment within different Agreements. Furthermore, the Marrakesh Ministerial Decision on Trade and Environment of 15 April 1994 provides a mandate and terms of reference for the WTO Committee on Trade and Environment (CTE). The Singapore Ministerial Conference directed the CTE to continue its work, under its existing terms of reference.

49. Concerning UNCTAD, at UNCED Governments recognized that "UNCTAD should play an important role in the implementation of Agenda 21 ... taking into account the interrelationships between development, international trade and the environment".[25] Post-UNCED, the description of UNCTAD's role in the field of trade and environment was sharpened by the Trade and Development Board (TDB)[26] and endorsed by the General Assembly. UNCTAD IX renewed UNCTAD's mandate on trade, environment and development. UNEP's mandate on trade and environment comes from successive sessions of its Governing Council. In addition, the CSD has played an important role in promoting cooperation and complementarity in the work of WTO, UNCTAD and UNEP and in identifying gaps. There has been a useful interaction between the CSD and other forums. For example, UNCTAD IX endorsed the work that the CSD, at its fourth session, had proposed for UNCTAD. Similarly, the first session of UNCTAD's Commission on Trade in Goods and Services and Commodities will inter alia examine recent progress and outstanding issues in integrating trade, environment and development, in particular with a view to providing inputs to the review carried out by the CSD, at its fifth session, and the General Assembly at its special session in 1997.

50. With regard to objective (c), encouraging a constructive role on the part of industry in dealing with environment and development issues, several forums have promoted interaction with the private sector. For example, UNEP has worked with the financial services sector since 1992. This work includes the promotion of statements by banks and by the insurance industry on their commitment to environment and sustainable development issues, as well as the organization of workshops, and the publication of newsletters. Progress has been made in incorporating environmental issues and considerations into the practices of the financial services sector, e.g., those associated with investment and risk management.

51. In addition, FDI holds the promise of contributing to environmental objectives and insofar as the integration of economies encourages the transfer and harmonization of environmentally friendly technologies across borders. However, it is not clear to what extent foreign investors have contributed enough leadership with respect to fulfilling local and global environmental targets. Further work aimed at promoting cooperation between host Governments and investors is needed to ensure that the full potential contribution that the private sector can make through FDI are realized. This issue is further analyzed below (sect. III.B).

B. Environmental policy and competitiveness

52. Since UNCED, the debate on the relationship between environmental policy and competitiveness has evolved considerably.[27] Conceptual and empirical analyses, in particular in UNCTAD and OECD, have contributed to a better understanding of the competitiveness issue and to the elimination of sources of potential friction. For example, fears concerning competitive deregulation of environmental standards following trade liberalization, "eco-dumping" or relocation of polluting industries to countries with lower environmental stringency have proven to be largely unsubstantiated. Governments have strongly rejected WTO inconsistent or protectionist trade restrictions (such as "green" countervailing duties) to offset any real or perceived adverse competitiveness

effect of applying environmental policies.[28] By doing so they have made important progress on Agenda 21, paragraph 2.22 (e).

53. Thus, as long as environmental policies comply with the principles of the multilateral trading system, their effects on competitiveness have been set aside as a relevant issue for trade rules. It is, however, important to examine the competitiveness effects of environmental policies from the perspective of environmental and developmental policy-making. For example, as mentioned above, there is a need to better understand the relationship between internalization of environmental externalities and competitiveness, in particular in the area of commodities. More recently, the debate, in particular in the developed countries has focused on positive linkages between environmental stringency and international competitiveness and on the potential for "win-win" situations. Generally, positive impacts could arise in cases where increased resource productivity can be achieved or where price premiums are available.

54. The OECD Joint Session of Trade and Environment Experts "has not identified a systematic relationship between existing environmental policies and competitiveness".[29] Similarly, work undertaken at UNCTAD so far suggests that many factors have a bearing on the competitiveness effects of environmental policies, including firm or sector-specific factors, general factors which may vary with the level of development, such as the availability of environmental infrastructure, and government policies.

55. SMEs and resource intensive industries are more likely to suffer adverse competitiveness effects as a result of certain types of environmental policies. Also the sectoral composition of exports, the large share of SMEs in exports and a weak domestic demand for environment-friendly products may make developing countries relatively more vulnerable to competitiveness effects of environmental requirements. The risk of adverse competitiveness effects on individual countries, in particular developing countries, is greatest in situations where specific PPMs and/or products are mandated, for instance in the framework of an MEA. Competitiveness effects then depend on the ability to introduce or adapt to the mandated technology at affordable cost. In the absence of positive measures for technology transfer or technical and financial assistance, adverse competitiveness effects may therefore occur.

56. In most cases, however, competitiveness effects of environmental policies can be addressed by appropriate policies at the national and international levels. Capacity-building, the provision of information, support to access technology and innovation, infrastructure, testing and certification, etc. are of key importance. To the extent that future environmental policies (e.g., increased efforts to avert the problem of climate change) may have stronger trade and competitiveness effects, such policies will become increasingly important.

C. Multilateral environmental agreements

57. The large number of multilateral environmental agreements (MEAs) clearly show the willingness and ability of the international community to deal with global environmental problems on the basis of multilateral cooperative

approaches. There has been considerable debate, however, on the policy instruments used to achieve the objectives of MEAs. Discussions have focused on (a) the relationship between trade measures pursuant to MEAs and the provisions of the multilateral trading system and (b) trade and economic effects of policy instruments used in MEAs.

1. The relationship between trade measures pursuant to MEAs and the provisions of the multilateral trading system

58. Agenda 21, paragraph 2.22, inter alia, proposes to "develop more precision, where necessary, and clarify the relationship between GATT provisions and some of the multilateral measures adopted in the environmental area". Post-UNCED this issue has been extensively debated, in particular in the CTE. The scope of discussions in the CTE is not to analyse all trade measures, but only those that may be inconsistent with WTO provisions. The CTE report notes that "views differed on whether any modifications to the provisions of the multilateral trading system are required .... This matter should be kept under review and further work under this Item should be carried out drawing on the work undertaken to date."[30]

59. Progress has nevertheless been achieved in building consensus on a number of issues, which may help in increasing mutual understanding and respect between trade and environment communities and in preventing conflicts from arising, as well as in providing a focus to the future debate.

60. For example, in the CTE discussions, the important role of MEAs to address transboundary and global environmental problems on the basis of an international consensus has been fully recognized. In its report, "the CTE endorses and supports multilateral solutions based on international cooperation and consensus as the best and most effective way for governments to tackle environmental problems of a transboundary or global nature. WTO Agreements and multilateral environmental agreements (MEAs) are representative of efforts of the international community to pursue shared goals, and in the development of a mutually supportive relationship between them due respect must be afforded to both".[31]

61. The international community widely recognizes the important role of positive measures to assist developing countries to meet multilaterally-agreed targets in MEAs, in keeping with the principle of common but differentiated responsibility (see also next section). In its resolution on trade and development, the General Assembly "reaffirms that positive measures such as market access, capacity-building, improved access to finance and access to and transfer of technology, taking into account the relationship between trade-related agreements and technology, are effective instruments in assisting developing countries to meet multilaterally-agreed targets".[32] The important role of positive measures in MEAs is also recognized in paragraphs 173 and 207 of the CTE report.

62. As in Agenda 21 (para. 2.20), the above-mentioned General Assembly resolution also notes that measures can, in certain cases, play a role in achieving the objectives of MEAs, while safeguarding a non-discriminatory and

equitable multilateral trading system. Similarly, the CTE recognizes that in a number of cases trade measures in MEAs have played a role in tackling global environmental problems, by stating that "Trade measures based on specifically agreed-upon provisions can also be needed in certain cases to achieve the environmental objectives of an MEA, particularly where trade is related directly to the source of an environmental problem. They have played an important role in some MEAs in the past, and they may be needed to play a similarly important role in certain cases in the future". However, the CTE report also notes that "Trade measures have been included in a relatively small number of MEAs. There is no clear indication for the time being of when or how they may be needed or used in the future. Up to now, there has been no GATT or WTO dispute concerning trade measures applied pursuant to an MEA."[33]

63. Furthermore, the CTE report includes a number of recommendations which help to prevent conflicts, in particular policy coordination between trade and environment policy officials at the national level[34] (a similar recommendation has been made by the CSD, at its fourth session) as well as cooperation between the WTO and relevant MEA institutions, including their secretariats.[35] It is also suggested that WTO Members should consider trying to resolve disputes over the use of trade measures they are applying between themselves pursuant to the MEA, through the dispute settlement mechanisms available under the MEA. Improved compliance mechanisms and dispute settlement mechanisms available in MEAs would encourage resolution of any such disputes within the MEA.[36]

64. One of the outstanding issues is the use of discriminatory trade measures against non-parties to an MEA. Some points that have emerged so far include the following: (a) some have pointed out that countries may have legitimate reasons not to join a particular MEA and that discriminatory trade measures should not be used to coerce countries to become signatories to an MEA; (b) there is no agreed operational definition of what constitutes an MEA based on a genuine multilateral consensus, and (c) it has been recognized that positive measures can be indispensable elements to facilitate the ability of Governments, particularly of developing countries, to become parties to an MEA and to help them tackle the environmental problems which the MEA is seeking to resolve.[37]

2. Trade and economic effects

65. It has been noted, in particular in discussions in UNCTAD and the CSD, that, while yielding global environmental benefits, MEAs may have broad economic effects.

66. UNCTAD's Ad Hoc Working Group on Trade, Environment and Development recognized that the trade and competitiveness effects of MEAs are different for each agreement and that these effects may change according to dynamic factors such as the rate of economic growth, availability of environmentally friendly technologies and substitutes, amendments to the agreements, as well as the timely availability of finance.

67. It has been increasingly recognized that positive measures are important and can be indispensable elements to assist developing countries to meet the multilaterally agreed targets of an MEA, in keeping with the principle of common

but differentiated responsibility. Positive measures include inter alia: access to finance, access to and transfer of technology, transitional measures and capacity building. UNCTAD's Working Group also discussed incentives that encourage trade in environment-friendly substitutes, voluntary mechanisms on foreign direct investment and technology transfer, and market-based instruments.

68. More empirical studies on the economic and developmental issues related to MEAs are needed. The CSD, at its third and fourth sessions, invited UNCTAD and UNEP to analyze the effects of trade measures and other policy instruments in MEAs on the achievement of environmental goals and on trade and competitiveness of developing countries and countries with economies in transition and how positive measures can assist those countries in meeting their obligations under the agreements. The UNCTAD secretariat is cooperating with UNEP in a project aimed at examining the contribution of different policy instruments, including both trade measures and positive measures, to achieving the environmental objectives of MEAs.[38]

D. Examining certain propositions and principles

69. Agenda 21, paragraph 2.21, called upon Governments to encourage GATT/WTO, UNCTAD and other relevant international and regional economic institutions to examine, in accordance with their respective mandates and competence, a number of propositions and principles. Progress in relation to the avoidance of trade restrictions to address competitiveness concerns (subpara. e) and the relationship between some of the multilateral measures and the GATT provisions (subpara. j) has been examined above. This section examines progress achieved on other subparagraphs.

70. Progress has been made in elaborating studies on trade, environment and sustainable development (subpara. a), for example in UNCTAD[39] (including studies elaborated by research institutes in developing countries, under joint UNCTAD/UNDP and UNCTAD/UNEP projects), UNEP, FAO,[40] UNIDO and the OECD. In its annual sessions, the CSD has identified gaps and has invited relevant international organizations to carry out further studies.[41]

71. Regarding the promotion of a dialogue between trade, environment and development communities (subpara. b), UNCTAD, WTO, UNEP and other international organizations have organized a large number of subregional and regional workshops and seminars on trade and environment and have supported similar activities organized by Governments and the civil society, in particular at the national level. UNEP and UNCTAD have co-hosted three high-level/Ministerial meetings on Trade, Environment and Sustainable Development, in February 1994, November 1994 and September/October 1996. Efforts have also been undertaken by NGOs.

72. Post-UNCED deliberations have reaffirmed the need to take account of the concepts and propositions contained in Agenda 21 and the principles contained in the Rio Declaration in the design and implementation of environmental policies with potential trade effects (subparas. c, f, g and i). For example, principles relating to equity and common but differentiated responsibilities are playing a key role in the ongoing discussions on Climate Change. Deliberations at UNCTAD

and the CSD have encouraged the exploration or other concepts and propositions, such as equivalency and mutual recognition. In discussions in various forums, some have proposed that concepts such as necessity, effectiveness and proportionality should be further explored. It has also been proposed that environmental principles such as precautionary and polluter-pays principles should be explored in the context of trade policies.[42]

73. With regard to encouraging the participation of developing countries in multilateral agreements (subpara. h), progress has been made in attaining greater universality of the multilateral trading system through the accession to the WTO by developing countries and countries in transition. Intergovernmental deliberations have emphasized the importance of rapid and full integration of these countries in the multilateral trading system and the need for technical assistance. Developing countries have also increased their participation in MEAs. It has been recognized that positive measures are important and may be indispensable elements to facilitate the ability of Governments, in particular in developing countries, to become Parties to an MEA.[43] For example, equity and social considerations are central to discussions of steps to be taken to implement the Framework Convention on Climate Change because of the need to gain widespread adherence.[44]

74. With regard to public inputs in the formation, negotiation and implementation of trade policies as a means of fostering increased transparency in the light of country-specific conditions (subpara. k), OECD Ministers adopted a procedural guideline on "transparency and consultation" in 1993. The CSD has highlighted "the importance of achieving transparency, openness and the active involvement of the public and experts in relation to the work on trade and environment".[45] In the WTO, the General Council, in July 1996, adopted Decisions on "Procedures for the circulation and derestriction of WTO documents" and on "Guidelines for arrangements on relations with non-governmental organizations".[46]

75. With regard to ensuring that environmental policies provide the appropriate framework to respond to new needs for the protection of the environment that may result from changes in production and trade specialization (subpara. l), the CSD has noted the importance of developing a framework to facilitate the assessment of the environmental impact of trade policies, taking into account the special needs of developing countries and countries with economies in transition, and has invited UNEP, in cooperation with UNCTAD, to undertake work in this area.

76. From the above it follows that intergovernmental organizations have made progress or are in the process of examining the different propositions and principles contained in Agenda 21, paragraph 2.22. The CSD, may wish to consider updating the "environment/trade and development agenda", based on its decisions on trade, environment and sustainable development adopted in 1994, 1995 and 1996 as well as its 1997 review.

III. OUTSTANDING AND EMERGING ISSUES

77. One of the tasks of the CSD has been to identify gaps in the programme of work undertaken by different intergovernmental organizations and to encourage appropriate action to fill those gaps, taking into account the mandates and

expertise of each organization. This chapter offers for consideration a number of cross-cutting issues which would appear to require further analyses. The CSD may wish to recommend future work on some of these issues.

A. Access to and diffusion of environmentally sound technologies and products

78. The implementation of the objectives set out in Chapter 2 of Agenda 21 has implications for access to and diffusion of environmentally safe technologies and products (EST&Ps) in particular to developing countries. This report complements the report of the Secretary-General on Chapter 34 of Agenda 21 "Transfer of ESTs, Cooperation and Capacity Building" (E/CN.17/WG/1997/2/Add.24), as it only refers to the issue of access and diffusion of ESTs in the trade and environment context.[47]

79. EST&Ps are required to ensure compliance with (a) multilaterally agreed targets in some MEAs; (b) certain environmental requirements of export markets; (c) improving environmental quality and achieving sustainable development. Environmental objectives would be better achieved if EST&Ps could be accessed and diffused to users across all countries, particularly to developing countries and the least developed among them.

80. In discussing these requirements, several issues have been highlighted that need attention in further work related to the implications of access to and diffusion of ESTs in the trade and environment interface: (a) relationship between IPRs and diffusion of ESTs; (b) provisions for technology transfer under MEAs; and (c) potential contribution of publicly owned technologies as a source of ESTs for developing countries.

1. Relationship between intellectual property rights and the transfer of ESTs

81. At a conceptual level, one of the key arguments advanced by advocates of stronger IPRs is that they could stimulate innovation, encourage FDI flows and associated technology transfers, and economic growth. By the same token, there are those who argue that at least in the short run, stronger IPR regimes may have the effect of raising the net costs of acquiring technologies, such as ESTs. In this respect, small firms in developing countries that lack the financial resources of large corporations are likely to face biggest constraints when acquiring proprietary technology. However, to date there is little conclusive evidence to support either argument thus pointing to the need for more empirical work.

82. The CTE[48] stated that "Further work is required to help develop a common appreciation of the relationship of the relevant provisions of the TRIPS Agreement to the protection of the environment and the promotion of sustainable development, and whether and how, in comparison to other factors, these provisions relate, in particular, to the following issues: (a) facilitating the generation of environmentally sound technology and products (EST&Ps); (b) facilitating the access to and transfer and dissemination of EST&Ps;

(c) environmentally unsound technologies and products; and (d) the creation of incentives for the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources including the protection of knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant to the conservation and sustainable use of biodiversity."[49]

2. Provisions for technology transfer under MEAs

83. MEAs, particularly the Montreal Protocol, the Climate Change and the Bio-diversity Convention have provisions with respect to technology transfer. The Montreal Protocol, in Article 10A, encourages the transfer of substitutes and related technologies to developing countries under fair and most favourable terms. However, developing countries have expressed concern with respect to limited cases of technology transfer under the Montreal Protocol and have called for a reassessment of the technology transfer mechanisms under the Protocol.[50] Under the FCCC, developing countries have also expressed concern over the lack of progress in discussions on technology transfer.[51]

84. It may also be useful to explore the opportunities for disseminating technologies through FDI. For example, according to a recent UNEP report, many Japanese, North American and European automobile, chemical, consumer product, electronics, and petroleum companies pledged to help the Government of Viet Nam to protect the ozone layer by investing only in modern, environmentally friendly technology in their Viet Nam projects.[52]

85. Initiatives for the wider dissemination of publicly owned technologies and for public domain technologies could also be considered in the framework of MEAs. (See below).

3. The issue of publicly owned technology and its potential contribution as a source of ESTs for developing countries

86. While public domain technologies are those which are not or not any more subject to IPRs, publicly owned technologies are the product of publicly financed research and development and may be protected by IPRs. In some developed countries, government funded Research and Development (R&D) accounts for a large part of all national R&D activities.

87. A basic feature of publicly owned technology is that Governments or other public entities exercise control over its generation and diffusion. In contrast, the generation and diffusion of privately owned technologies are driven by market forces. Agenda 21 noted that it was important to formulate "policies and programmes for the effective transfer of environmentally sound technologies that are publicly owned or in the public domain".

88. Some developed countries conduct a wide range of technical assistance activities and joint scientific programmes in which technology is created and shared equally. These programmes have proved to be an effective vehicle for the

transfer of technical knowledge and technology to developing countries. Such programmes should be supported and disseminated both bilaterally and multilaterally.

89. The implementation of mechanisms for accessing and disseminating publicly financed technologies to developing countries poses a number of questions which would require further analysis. First, it is important to determine to what extent publicly financed technology could be classified as environmentally sound to meet priority demands of developing countries.[53] This information is more tractable in the context of MEAs and warrants separate analysis. Second, there is a need to outline the conditions under which such technologies could be successfully adopted in developing countries. Third, there is a need for identifying new and innovative mechanisms to determine the extent to which publicly financed technology could be disseminated to developing countries. Databases on IPRs, joint scientific programmes, and other incentive structures would need to be assessed in detail with a view to promoting wider dissemination of such technologies to developing countries.

B. Trade, investment, and environment

90. The principal emerging issues with respect to international investment and the need for sustainable development concern (a) the incorporation of countries and regions that have not benefited from the FDI boom of the 1990s; (b) the potential positive role that TNCs could play in conjunction with governments in achieving global goals on emission standards; and the (c) continued competition among developing countries for foreign capital. With respect to the latter, it remains true that the benefits of international investment for developing countries and for sustainable development have to date been achieved in the context of a process of liberalization that has motivated TNCs to compete actively for markets in both goods (and services) and factors of production. Governments will therefore increasingly have to consider and weigh policies with a view to encouraging and fostering healthy competition and avoid policies that seek to attract capital on the basis of lowest common denominator variables.

91. Apart from providing additional resources that can contribute to sustainable development, foreign direct investment (FDI) has an important role to play in providing host countries, particularly developing countries, with easier access to EST&Ps.

92. The early debate on the relationship between FDI and the environment largely focused on the issue of "dirty industry migration". More recently, discussions have focused on the issue of technologies and management practices associated with FDI. According to one hypothesis, transnational corporations (TNCs) tend to apply the environmental standards and management practices of the corporation or the home country, which often go beyond local legal requirements in the host country. According to another hypothesis, however, trade liberalization and FDI can at times result in the transfer of technologies and products (to developing countries) which have become "obsolete" as a result of increasingly stringent environmental policies and regulations in developed countries.

93. As far as global problems are concerned, there is a considerable potential for generating win-win scenarios if foreign investors also transfer best environmental practices and technologies in order to enable developing countries to meet their commitments under MEAs. For example, under the Montreal Protocol, while the transfer of technologies using chlorofluorocarbons (CFC) and CFCs through FDI to Article 5 countries would be entirely consistent with differential compliance schedules, it could nevertheless undermine the achievement of global targets on reduction of CFCs. Appropriate policies on the part of the host country as well as responsible environmental behaviour of investors should be encouraged, for example through voluntary mechanisms.

94. Further work could focus on (a) empirical studies on the environmental practices associated with FDI; (b) designing policies and measures to promote the transfer of environmentally sound technologies and environmentally sound practices through FDI, especially in the context of MEAs; and (c) identifying positive synergies between policies which promote trade liberalization, investment, and environmental policies.

C. Small and medium-sized enterprises

95. Discussions and analysis so far have recognized the special situation of SMEs in the trade and environment interface. The high rate of participation of SMEs in exports from several developing countries as well as the special circumstances of their operation make it imperative that the design of environmental policies take account of their special conditions. At the same time, the environmental practices of SMEs may need to be regulated in the interest of public health and environmental protection.

96. Case studies at UNCTAD and UNIDO have shown that, depending on the industry concerned, the capacity of SMEs to invest in environmental improvements in developing countries is relatively limited, particularly for those environmental standards which require large outlays for technological improvements. In some cases, e.g., leather and textiles, environmental improvements will have to be phased in gradually or these industries may become unviable. However, there are also cases where SMEs have been able to adapt more easily to environmental requirements, particularly in developed countries.

97. Technological assistance from small scale units in developed countries to those in developing countries could also be of benefit. Another alternative being explored in order to facilitate the adaptation to environmental standards is to encourage the transfer of FDI to SMEs in developing countries.

98. Issues deserving future analysis are (a) whether there is a need to accord special treatment to SMEs in both MEAs and in the multilateral trading system (e.g. the Agreement on Subsidies and Countervailing Measures) in the course of raising environmental standards; (b) whether special trading opportunities could assist SMEs in moving to higher environmental standards; and (c) what should be the basic features in the design of a package of measures for SMEs.

D. Reflection of environmental costs and resource scarcities in commodity prices

99. Agenda 21 recommends to "reflect efficient and sustainable use of factors of production in the formation of commodity prices, including the reflection of environmental, social and resources costs" (para. 2.14 (c)). The objective of internalization is the incorporation of external costs and benefits into the decision calculus of economic agents (producers and consumers) in order to alter their behaviour towards a socially optimal production and consumption mix. One aspect of internalization is thus the internalization of environmental costs and benefits in producer prices. Another aspect is their reflection (in full or in part) in export prices. This reflection has two implications: on the one hand, it influences the behaviour of consumers towards more sustainable consumption patterns; on the other hand, it facilitates cost internalization at producer's level provided producers get an adequate remuneration from higher international prices.

100. Post-UNCED intergovernmental deliberations, in particular in UNCTAD and the CSD, have indicated that internalization is an important but complex issue. While highlighting the self-interest of developing countries in environmental protection and thus internalization, much of the discussion has centred on theoretical issues, such as the concept of internalization, the identification of the environmental costs that producers would need to internalize,[54] the chances for internalization in the light of the nature of commodity markets, the various policy instruments and the interaction between regulatory and economic instruments of internalization.[55] Analytical and empirical gaps still exist on the assessment of the effects of internalization on production costs, volumes and other socio-economic variables as well as on the trade effects of internalization under different international cooperation scenarios. Some preliminary conclusions can be drawn from analytical work conducted so far.

101. First, in developing countries, developmental objectives and priorities such as foreign exchange generation, equitable income distribution, employment creation, the provision of basic human services and increasing competitiveness naturally have a bearing on the weight given in the overall policy mix to environmental issues, the implementation and effectiveness of internalization policies as well as the selection and combination of internalization instruments.

102. Secondly, there is a need to better understand the relationship between internalization and competitiveness. If environmental resources are underpriced, the short-term effect of cost internalization will be an increase in production costs. This may reduce competitiveness at the firm or sector level. However, internalization can also increase competitiveness at the national level[56] in three ways: (a) by reducing input use and increasing efficiency; (b) by reducing waste and pollution and thereby lowering abatement and remediation costs; and (c) by reducing resource depletion. Successful internalization also encourages innovation and structural change/diversification.

103. Thirdly, it is also very important to determine how much and how fast to internalize. Internalization should only be carried out up to the level where

the incremental benefits (in terms of avoided damage to health, animal and plant life, environmental degradation, reduction in future productivity and economic use of natural resources) warrant the incremental costs (in terms of reduction of economic output and/or the abatement/enforcement costs incurred). Full cost internalization will rarely be optimal. The chosen degree of internalization will therefore vary significantly from country to country (and even between regions of the same country) depending on many factors such as levels of exposure, extent of physical damage, and level of development. Moreover, the optimal level of internalization cannot be implemented overnight since irreversible investments have been made and capital stock is in place under the wrong price signals. Sudden internalization is also likely to generate conflicts between environmental protection, the need for structural change and narrowly understood sectoral competitiveness. Therefore, a gradual implementation schedule of internalization must be selected taking into account the rate of depreciation of the capital stock and other adjustment costs, with particular regard to distributional considerations and the alleviation of poverty. The key objective of internalization is not to punish for past actions, but to provide signals to influence future behaviour on abating or removing existing environmental problems. Influencing investors' expectations about the future and hence their investment decisions is far less costly than abrupt adjustments caused by sudden internalization shocks and may involve win-win scenarios.[57]

104. Fourthly, unilateral internalization at the producer's level could be beneficial especially in the long run, but short-term costs and the uncertainty about foreign exchange earnings, global commodity demand, and socio-economic implications are formidable constraints[58] as they have been in the removal of trade barriers.[59] Intergovernmental cooperation is therefore likely to be important to encourage internalization at the producers level and facilitate the reflection of these producer prices in international commodity prices and/or provide finance for environmentally sound processing methods. This cooperation could take many forms and include cooperation among countries producing the same or substitute commodities, as well as cooperation between producers and consumers. Special measures could be taken to facilitate market access for commodities and other goods produced in an environmentally sound way, in particular in developing countries.[60] Moreover, technical and financial assistance could be provided, principally by developed countries. Regarding such assistance, the resources thus transferred could be considered to reflect the share of the internalization burden that would fall on the consumers had the producing countries been able to reflect internalized costs in export prices.

105. At its fourth session, the CSD encouraged international organizations, Governments and the business community "to intensify the search for pragmatic methods for increasing cooperation between exporters and importers with a view to facilitating developing countries' efforts to internalize environmental costs in their development process and to assess the scope for the establishment of sectoral round tables and other formal or informal arrangements for identifying efficient and cost-effective approaches".[61] There appears to be much merit in round tables with a view to identifying the constraints to internalization in the specific commodity/industry context as well as finding ways and means for successful internalization.[62]

106. UNCTAD, in collaboration with UNEP, has conducted a series of sector-specific studies on the scope for internalization at producers level. These studies have been very useful in identifying opportunities and constraints as well as promising instruments of internalization. Further analytical work in this regard is required to go beyond the existing few promising product cases. This analytical work will also be useful in reviewing the scope for the removal of policy failures, such as protectionist barriers and subsidies, which inhibit internalization in producer prices and its reflection in international commodity/goods prices.

E. Internalization of positive externalities

107. Most of the debate on internalization has focused on negative environmental externalities (i.e., costs); the case of positive externalities (i.e., benefits) has received less attention. One of the clearest examples of positive environmental externalities is provided by natural ecosystems, since they provide a wide range of local, national and international benefits, including watershed protection, eco-tourist revenues, and carbon sequestration. However, because of the existence of market failures, these benefits often do not provide central governments or local populations with sufficient economic incentives to preserve primal forests, wetlands, coral reefs and other biologically diverse ecosystems.

108. Policy-makers have therefore increasingly focused on positive measures largely based on market mechanisms and financial incentives to capture the numerous external benefits provided by biologically diverse ecosystems.[63] These mechanisms include debt-for-nature swaps, transferable development rights, green taxes on eco-tourist activities, watershed protection payments, and managed harvest rights in protected areas. The emergence of an active biochemical prospecting market can provide an additional means of converting the potential future value of biodiversity into current income for those most responsible for, and most affected by, the preservation of biologically diverse ecosystems. However, simply creating a market for trade in biological material may not in itself generate significant conservation incentives or benefits for the host country; this will require economic and market research, alternative contractual arrangements and guidelines on access to biological and genetic resources, training and capacity-building, the promotion of incentive measures for benefit sharing, access to and transfer of technology related to the development of bio-resource industries in developing countries, as well as data dissemination and networking.

109. An important element in this connection is improvement in the capabilities of developing countries to compete in the emerging market for biological resources, while reducing transaction costs and increasing demand for biochemical resources. Under the heading of BIOTRADE, the UNCTAD secretariat is working towards such as improvement through a collaborative effort with the Secretariat of the Convention on Biological Diversity (CBD), interested United Nations agencies and other intergovernmental and non-governmental organizations, the private sector, local communities and academic institutions.[64]

IV. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

110. Intensive intergovernmental deliberations have promoted increased awareness and understanding of trade and environment linkages, as well as greater confidence and mutual respect between trade, environment and developmental communities, and have reiterated a clear commitment to address trade and environment on the basis of multilateralism and cooperative approaches. Governments have taken appropriate steps to include Agenda 21 follow-up activities, particularly in the area of trade and environment, firmly in the work programmes of GATT/WTO, UNCTAD and other relevant international organizations.

111. Trade and environment linkages have proved to be far more complex than originally envisaged. The Singapore Ministerial Declaration has indicated "the breadth and complexity" of the issues on the trade and environment agenda. Furthermore, the debate has revealed the absence of a unique trade, environment and development agenda. It may therefore be necessary to examine the direction of the future trade, environment and development agenda and possible approaches to issues.

B. Recommendations

112. In the context of the overall objectives of sustainable development, the Commission on Sustainable Development (CSD) may wish to reiterate the continuing validity of all the decisions on trade, environment and development made at its second, third and fourth sessions. In addition, in the light of the analysis contained in this report, the following recommendations are put forward for consideration:

1. Promoting sustainable development through trade

113. With a view to promoting sustainable development through trade, the CSD may wish to consider the following:

(a) Timely and full implementation of the results of the Uruguay Round negotiations will make a significant contribution to meeting the objectives of this programme area;

(b) For all developing countries to benefit more fully from trade liberalization, the achievement of other objectives identified in Agenda 21, particularly in the areas of commodity trade, increasing foreign direct investment (FDI) in developing countries and financial assistance, including debt relief, is important and should be encouraged;

(c) Trade liberalization should be accompanied by efforts to enhance the trade performance of low-income, commodity-dependent countries and other countries which remain marginal participants in world trade, in particular the least developed countries;

(d) Further work is needed to ensure that the implementation of environmental measures does not result in disguised restrictions on trade, particularly those that have adverse effects on existing market access opportunities of developing countries;

(e) Additional market access, particularly for products from developing countries, could generate environmental benefits. Market access, however, should not be conditional upon environmental performance beyond the requirements needed to protect the local environment in the importing country or to comply with multilaterally agreed standards in the context of MEAs;

(f) Trade liberalization should be accompanied by environmental and resource management policies if its full potential contribution to better protecting the environment and promoting sustainable development through more efficient allocation and use of resources is to be realized.

114. Further analysis is needed to identify efficient and cost-effective approaches to the internalization of environmental cost and benefits, in particular in the commodities sector. Further work could focus on:

(a) An examination of successful experiences with internalization in the case of specific commodities;

(b) Further sector-specific studies on identifying opportunities and constraints as well as promising instruments of internalization;

(c) Round tables and other arrangements for the reflection of internalized costs in international commodity prices;

(d) The promotion of trade in environmentally preferable products;

(e) The internalization of positive externalities which may result both in enhanced environmental protection and in generating additional resources for developing countries.

2. Making trade and environment mutually supportive

115. The scope for making trade and environment mutually supportive could be explored in the following ways:

(a) More emphasis should be given to policy coordination at the national level between environment, trade and development Ministries;

(b) There should be an integrated and balanced approach to trade, environment and development, taking into account the need for continued close cooperation and coordination between WTO, UNCTAD, UNEP and other international and regional organizations. The CSD should take this into account in formulating its future work programme at both sectoral and cross-sectoral levels;

(c) There is a need to strengthen technical assistance for capacity-building undertaken by UNCTAD, UNDP, UNEP, ITC and other relevant international organizations, including in integrating the consideration of all factors relevant to the formulation of trade and sustainable development policies.

116. With regard to competitiveness, technology development has a key role to play in mitigating adverse and strengthening positive effects of environmental policies on competitiveness. Cooperation between government and industry in achieving pollution reduction and enhanced environmental management alongside economic growth should be encouraged at the national and international levels.

117. Further work is required on trade and sustainable development issues arising out of MEAs, taking into account the specific context of each MEA.

(a) More country-specific analysis is required to review the environmental effectiveness and economic efficiency of specific policy instruments employed in MEAs, including trade measures and positive measures, with a view to achieving the targets of MEAs;

(b) It is important to explore incentives and mechanisms at the national and international levels which encourage access to, and the diffusion of technologies, trade and investment to promote the use of environment-friendly alternatives with a view to tackling the environmental problem that the MEA is seeking to address.

3. Outstanding and emerging issues

118. The CSD may wish to recommend future work in the following areas:

(a) The role of the generation and diffusion of environmentally sound technologies in promoting the integration of trade, environment and development;

(b) The role that FDI can play in supporting developing countries in their efforts to achieve the objectives of sustainable development, including in the context of MEAs;

(c) Mechanisms to take account of the special conditions and needs of SMEs;

(d) Emerging trade and environment issues in the design and implementation of positive measures in MEAs;

(e) Incentives and partnership arrangements based on the fair and equitable sharing of the benefits arising out of the utilization of genetic resources in promoting the conservation of biological diversity, including UNCTAD's work on BIOTRADE;

(f) Trade effects of internationally agreed standards on environmental management systems.

Notes

[1] "Integrating trade, environment and development: recent progress and outstanding issues", (TD/B/COM.1/3) Geneva, 1996.

[2] See WTO, Report (1996) of the Committee on Trade and Environment, para. 167. PRESS/TE 014, 18 November 1996. WTO, para. 167.

[3] Commission on Sustainable Development, second session, decision on trade, environment and sustainable development. Report of the Commission on Sustainable Development on its Second Session. Official Records of the Economic and Social Council, 1994, Supplement No. 15 (E/1994/33), para. 30.

[4] Agenda 21 called upon industrialized countries and other countries in a position to do so to strengthen their efforts, inter alia "to ensure that the processes of policy coordination take into account the interests and concerns of the developing countries, including the need to promote positive action to support the efforts of the least developed countries to halt their marginalization in the world economy" (para. 2.35 (c)).

[5] See the section on globalization. A Partnership for Growth and Development (final report of UNCTAD IX, TD/378, part one, section A).

[6] Commission on Sustainable Development, op. cit., para. 30.

[7] UNCTAD, World Investment Report, 1996.

[8] A recent report notes that trade liberalization can make multiple contributions to the financing of environmental investments by making (a) necessary foreign exchange available; (b) less-polluting production and pollution abatement technology accessible; and (c) private capital flows and direct foreign investment attracted to the country. See Theodore Panayotou, "Matrix of Policy Options and Financial Instruments", in Third Expert Group Meeting on Financial Issues of Agenda 21, 6-8 February 1996, Manila, the Philippines.

[9] WTO, op. cit., para. 109.

[10] WTO, op. cit., para. 109.

[11] Commission on Sustainable Development, third session, decision on trade, environment and sustainable development. Report of the Commission on Sustainable Development on its Third Session. Official Records of the Economic and Social Council, Supplement 12. (E/1995/32), para. 58.

[12] Ibid.

[13] OECD, Procedural Guidelines on Trade and Environment, OECD/GD(93)98. Paris, 1993. These guidelines have been further elaborated in the report Methodologies for Environmental and Trade Reviews (OECD/GD(94)103). Responses by OECD Member Governments to an OECD secretariat's questionnaire on implementation of these guidelines are contained in report OECD, Implementation

of the OECD Procedural Guidelines on Trade and Environment. OECD/GD(96)98. Paris, 1996. Only a few governments have conducted environmental reviews, including assessment of environmental issues related to the Uruguay Round of multilateral trade negotiations. The United States, Canada and Mexico have carried out environmental reviews of the North American Free Trade Agreement (NAFTA). In practice, environmental effects of trade policies may be considered as part of broader environmental assessment requirements.

[14] UNEP has prepared a background paper on environmental reviews.

[15] "Nevertheless, the CTE should keep under review the adequacy of existing transparency provisions with respect to trade-related environmental measures". WTO, op. cit., para. 189.

[16] UNCTAD, "The policy debate on trade, environment and development", TD/B/WG.6/10, September 1995.

[17] In a white paper prepared by the European Commission, it has been proposed that developing countries could benefit from provisions concerning differential schedules for compliance with trade-related environmental measures, such as time limited exceptions, or the use of a de minimis clause.

[18] CSD, third session, Decision on trade, environment and sustainable development, para. 57.

[19] UNCTAD, Environmentally preferable products as a trade opportunity for developing countries, UNCTAD/COM/70, December 1995.

[20] Agenda 21 (Chapter 4) encouraged the expansion of environmental labelling and other environmentally related product information programmes designed to assist consumers in making informed purchasing decisions (para. 4.21).

[21] CSD, 4th session, decision on trade, environment and sustainable development, para. 5.

[22] However, the ISO 14000 standard on environmental management systems (EMS) is based on commitment to comply with national environmental legislation and regulation, rather than specific values or thresholds.

[23] WTO, op. cit., para. 185.

[24] See, for example, CSD, third session, Decision on trade, environment and sustainable development, para. 69, as well as CSD, fourth session, Decision 4/1 on trade, environment and sustainable development, para. 3.a.

[25] Agenda 21, para. 38.26.

[26] "UNCTAD's special role in the trade and environment field lies in policy analysis and debate, conceptual work, the building of consensus among member States on the interaction between environmental and trade policies, the dissemination of information to policy-makers and the encouragement and provision of technical assistance in capacity-building. Particular attention

should be given to the problems and the special circumstances of the developing countries, including the least developed among them. Attention should also be given to the countries in transition" UNCTAD, para. 3 (a) of Conclusion 407(XL).

[27] It is to be noted that international competitiveness is only one of the factors that national governments will take into account in assessing the efficacy of environmental policies. In considering various policy options, economic theory indicates that the set of environmental, social and trade policies that in combination provide the greatest welfare gains for the country should be adopted. National welfare considerations may outweigh concerns about competitiveness at the firm or sector level. Both competitiveness at the firm or sectoral level and the concept of national welfare are important.

[28] At the same time, it has been widely recognized that it would be inappropriate to relax existing environmental standards or their enforcement to promote trade and investment. See, for example, Commission on Sustainable Development, fourth session, Decision 4/1 on Trade, Environment and Sustainable Development, para. 4.c. Commission on Sustainable Development, Report on the Fourth Session. E/1996/28 and E/CN.17/1996/38.

[29] OECD, op. cit., para. 25.

[30] WTO, op. cit., para. 176.

[31] WTO, op. cit., para. 171

[32] General Assembly resolution 51/167 of 16 December 1996, sect. 2, para. 10.

[33] WTO, op. cit., para. 174 (i).

[34] WTO, op. cit., para. 174 (vi).

[35] WTO, op. cit., para. 175.

[36] WTO, op. cit., para. 178.

[37] WTO, op. cit., para. 173.

[38] OECD, 1996, Experience with the use of Trade Measures in the Convention on International Trade in Endangered Species (CITES), Paris 12-13 February 1997.

[39] For a description, see TD/B/COM.1/3/Misc.2.

[40] For a description of FAO's work see Trade, environment and sustainable agricultural and rural development (SARD): Follow-Up Activities, CCP:97/15.

[41] For progress on work proposed for UNCTAD, see Department for Policy Coordination and Sustainable Development (DPCSD), UNCTAD Activities on Trade, Environment and Development 1995-1996, Note by the UNCTAD Secretariat, Background paper #21 for the Commission on Sustainable Development, Fourth Session. See also TD/B/COM.1/3/Misc.2.

[42] See for example, CSD, third session, Decision on trade, environment and sustainable development, para. 66.

[43] See, for example, WTO, op. cit., para. 173.

[44] Climate Change 1995, Economic and Social Dimensions of Climate Change. Contribution of Working Group III to the Second Assessment Report of the Intergovernmental Panel on Climate Change.

[45] CSD, Decision on trade, environment and development, third session, para. 72.

[46] For further details see; WTO, op. cit., paras. 212 to 218.

[47] Discussions on trade, environment and development in UNCTAD, CSD and the CTE have referred to the issue of access to and transfer of technology in the context of positive measures. The CSD has listed such measures as instruments to assist developing countries in their efforts to internalize environmental costs (1995 Decision on trade, environment and sustainable development, para. 52) or to meet multilaterally agreed targets under MEAs (1996 Decision, para. 3b). While focusing on the generation of, access to and transfer of ESTs as related to the TRIPs Agreement, the CTE report also refers to the issue of access to and transfer of technology in its sections on environmental requirements (para. 63), eco-labelling (para. 80), market access and trade liberalization (paras. 99 and 110), domestically prohibited goods (para. 205) and MEAs (paras. 25, 173 and 207). See CTE, op. cit.

[48] WTO, op. cit., para. 208.

[49] Some issues are under consideration by the Parties to the Convention on Biological Diversity who are also looking at the synergies and relationship between its objectives and the TRIPs Agreement. See WTO, op. cit., para. 209.

[50] Minutes of the Open Ended Working Group of the Montreal Protocol, Geneva, August 1996.

[51] Minutes of the Conference of Parties to the United Nations Framework Convention on Climate Change, Geneva, December 1996.

[52] UNEP, Technology and Economic Assessment Panel. Report to the Parties. November 1995, page II-23.

[53] According to some estimates, environmental protection accounts for between 0.6 and 4.2 per cent of Government R & D expenditures in selected OECD countries. See P. G. Sternberg, Research Policy 5 (1996).

[54] Proops, J.; Steele, P. and D. Pearce, The internalization of environmental costs and resource values: a conceptual study (UNCTAD/COM/27), June 1994; Karp, L., Review of environmental damage estimates in agriculture and internalization measures (UNCTAD/COM/52), April 1995.

[55] UNCTAD, The effect of the internalization of external costs on sustainable development (TD/B/40(2)/6), February 1994.

[56] Understood here as the "ability of a country to produce goods and services that meet the test of international markets while its citizens earn a standard of living that is both rising and sustainable over the long run." Charnovitz, S., Environmental trade measures and economic competitiveness: an overview of the issues, in: OECD environmental policies and industrial competitiveness, OECD, Paris, 1993.

[57] T. Panayotou, Internalization and competitiveness (UNCTAD/COM/Misc.), October 1995.

[58] Constraints, whether real or conceived, have also affected cost internalization on developed countries.

[59] Unilateral internalization of environmental costs in the commodity sector would be affordable for developing countries if increased environmental costs were mostly reflected in international commodity prices and this price increase did not lead to much reduced foreign exchange earnings. UNCTAD analysis (TD/B/CN.1/29), however, has shown that since an increase in international commodity prices is likely to lead to declining commodity demand, other arrangements would clearly need to be considered.

[60] This implies preferential market access measures in addition to those already existing. They should however not negate opportunities arising from normal market access conditions.

[61] Para. 8b, CSD Decision of the fourth session.

[62] The International Rubber Study Group, in collaboration with UNCTAD, will be convening a round table on internalization in the case of natural and synthetic rubber starting in June 1997.

[63] See also OECD, "Saving Biological Diversity: Economic Incentives", 1996.

[64] The CSD, at its fourth session, welcomed BIOTRADE and encouraged further consultations on this matter. In response, the UNCTAD secretariat presented BIOTRADE at the III Meeting of the Conference of the Parties to the Convention on Biological Diversity (COP III) held in Buenos Aires (4 to 15 November 1996). COP III stressed the need for close coordination with UNCTAD in the fields of access to genetic resources and incentive measures.